DOE F 1325.8
(8-89)
EFG (07-90)

United States Government **Department of Energy**

memorandum

DATE: JUN 22 2001

REPLY TO ATTN OF: EM-21 (T. Kiess, (301) 903-1446; G. Roberson, (505) 845-5805)

SUBJECT: Change Notice for Authorization of a Procedural Allowance to Rocky Flats Environmental Technology Site

TO: Richard Serbu, Office of Nuclear Safety Policy and Standards, EH-3 1

This memorandum provides a "Change Notice," required by the Department of Energy (DOE) Technical Standards Program Procedures document, "Maintenance of DOE Technical Standards" (DOE-TSPP-9, Rev. 5). The addendum to this memorandum describes a procedural allowance to the Rocky Flats Environmental Technology Site. This allowance is a lmm modification to the 126mm diameter specification in Section 6.2.2, item 3, of DOE-STD-3013. This 1mm modification exceeds the size tolerances and clearances allowed by USA Standard B4.1-1967, sponsored and published by the American Society of Mechanical Engineers, for any fit of the DOE-STD-3013 container within a 9975 packaging/shipping container.

David G. Huizenga
Deputy Assistant Secretary for
Integration and Disposition
Office of Environmental Management

Attachments
cc:
R. Schepens, SR
P. Knollmeyer, RL
H. Dalton, RF
W. J. Arthur, III, AL
A. Whiteman, AL
M. Hooper, OAK
J. T. Davis, OAK
S. Sohinki, DP-25
T. Pflaum, DP-253
S. Pier-point, DP-253
R. Crowe, DP-45
R. Cooperstein, DP-45
V. Loczi, DP-45
A. Cygelman, NN-62
J. Bozik, NN-62
C. Huntoon, EM-l

J. Serocki, EM-5
D. Huizenga, EM-20
P. Bubar, EM-20
J. Tseng, EM-21
T. Kiess, EM-21
J. Fiori, EM-30
M. Jones, EM-33
M. Frei, EM-40
B. Smith, EM-42
J. Rhoderick, EM-43
R. Sena, AL
S. Arp, AL
c. Cruz, AL
J. Shakiba, OAK
K. Dodson, LLNL
R. Mason, LANL
R. Erickson, LANL
A. Gunter, SR
R. Kasdorf, DNFSB staff
D. Williams, ORNL

DOE F 1325 8
(8-89)
EFG (07-90)

United States Government **Department of Energy**

memorandum

DATE: JUN 0 8 2001

REPLY TO ATTN OF: Nuclear Materials Stewardship Program (T. Kiess, 301-903-1446; G. Roberson, 505-845-5805)

SUBJECT: Authorization of a Procedural Allowance to Rocky Flats Environmental Technology Site

TO: Richard Serbu, Office of Nuclear Safety Policy and Standards, EH-3 1
Gary Roberson, DOE-AI

This memorandum responds to a request (Attachment 1) by the Rocky Flats Environmental Technology Site (RFETS) to address a potential operational concern identified in preparing its plutonium stabilization and packaging system for start-up (specifically, the laser welder may produce a weld projection beyond the container's outside surface that prohibits the welded container from meeting the 126mm diameter right circular cylinder requirement of the DOE-STD-30 13 standard). RFETS has requested to increase this requirement by 1mm which is a value that exceeds the size tolerances and clearances of the applicable American Society of Mechanical Engineers Standard.

This issue was reviewed by the DOE-STD-3013 Technical Review Board and by the Savannah River Operations Office, and both groups determined that the request does not affect the safety of long-term storage of properly stabilized plutonium-bearing materials (Attachment 2). This allowance could avoid unnecessary worker radiation exposure, and could ensure that operational throughput at RFETS is not compromised for sufficiently small weld projections. RFETS will use a "GO-Gauge" (Attachment 3) to verify compliance as part of its procedures.

By this memorandum, the Offices of Defense Programs (DP), Fissile Material Disposition (NN-60), and Environmental Management (EM) authorize a procedural allowance to permit DOE-STD-30 13 containers produced by RFETS to fit within a right circular cylinder of up to 127mm, which is a lmm allowance to the 126mm diameter specified in DOE-STD-3013, Section 6.2.2, item 3. In addition, RFETS will pursue continuing process improvement in order to meet the present 126 mm diameter limit.

We direct the Standard Manager at AL to review DOE-STD-3013 and provide options to separate those requirements that are critical to safe stabilization and packaging of plutonium-bearing materials, and options to institutionalize those requirements that are not critical to safety.

DOE-STD-3013 is not changed at this time.

Timothy D. Pflaum — 6-8-2001

Timothy D. Pflaum, Acting Director, (Date)
Office of Nuclear Material Management, DP-253

Andre I. Cygelman — 6-8-01

Andre I. Cygelman, Director (Date)
Office of Fissile Materials Disposition, NN-62

John C. Tseng — 6-08-01

John C. Tseng, Director, (Date)
Office of Nuclear Material and Spent Fuel, EM-2 1

Attachment 1: RFETS request
Attachment 2: Rationale for this allowance, including SR and TRB recommendations
Attachment 3: RFETS procedures to assess compliance with DOE-STD-3013, Section 6.2.2, item 3, and a photograph of the GO-Gauge used at RFETS

cc:
R. Schepens, Assistant Manager, Material & Facility Stabilization, SR
P. Knollmeyer, Assistant Manager, Nuclear Materials & Facility Stabilization, Richland
H. Dalton, Assistant Manger, Material Stabilization & Disposition, RFFO
W. J. Arthur, III, Assistant Manager, Environmental Operations and Services, AL
Albert Whiteman, Assistant Manager, Technology and Site Programs, AL
M. Hooper, Assistant Manager, National Security, OAK
James T. Davis, Assistant Manager for Environmental Management, OAK
S. Sohinki, DP-25
T. Pflaum, DP-253
S. Pier-point, DP-253
R. Crowe, DP-45
R. Cooperstein, DP-45
V. Loczi, DP-45
A. Cygelman, NN-62
J. Bozik, NN-62
C. Huntoon, EM-l
D. Huizenga, EM-20
P. Bubar, EM-20
J. Tseng, EM-21
T. Kiess, EM-21
J. Fiori, EM-30
M. Jones, EM-33
M. Frei, EM-40
B. Smith, EM-42
J. Rhoderick, EM-43
R. Sena, DOE-AL
S. Arp, DOE-AL
C. Cruz, DOE-AL
J. Shakiba, DOE-OAK
K. Dodson, LLNL
R. Mason, LANL
R. Erickson, LANL
A. Gunter, DOE-SR

DOE F 1320.0

United States Government **Department of Energy**

memorandum

Rocky Flats Field Office

DATE: NOV 0 3 2000

REPLY TO ATTN OF: AMFD:FCG:DAH:00-03969

SUBJECT: Maxjmum Size of 30 13 Storage Assembly - DOE-STD-3013-2000

TO: Gary D. Roberson, Nuclear Material Stewardship Program Office, AL

The purpose of this memorandum is to request a change to DOE-STD-3013-2000 concerning the maximum size of the 3013 assembly. Specifically, Paragraph 6.2.2.3.1) requires that thc "loaded and assembled outer container shall fit within a right circular cylinder" with an inside diameter of 126 mm (4.961 inches). The Rocky Flats Environmental Technology Sire (Site) has determined that the 126 mm requirement is not compatible with the 3013 design and the closure weld process,

The following summarizes the Site's analysis of the maximum size of the 3013 container assemblies. This analysis accounts for the dimensional sizes and tolerances for the outer container und lid [from the Savannah River Site (SRS) design drawing M-PV-F-0017, Revision 0], estimated weld protrusion, and estimated expansion from heating due to plutonium (Pu) content:

• Maximum diameter:	125.10 mm
• Perpendicularity tolerance:	0.30
• Runout of the lid fitment diameter, container:	0.20
• Runout of the lid fitment diameter, lid:	0.05
Total of dimensional tolerances:	125.65 mm
• Weld protrusion, diametrical (based on Site experience to date):	1.00 mm
• Estimated heat expansion from Pu content:	0.28 oo
Total maximum size of 3013 assemblies:	126.93 mm

Measurements obtained thus far by the Sitc on mock 3013 container assemblies, without Pu contents, bavc confirmed the incompatibility between thc actual size of 3013 container assemblies and the 126 mm requirement in 3013-2000. These measurements indicate that approximately 17 percent of the 3013 container assemblies produced by the

Site's Plutonium Stabilization and Packaging System will not fit into the 126 mm cylinder required by 3013-2000. Further evaluation has confirmed that while these containers would not fit into the 126 mm cylinder, they will fit into the primary containment (PCV) vessel for the 9975 container, the package the Site intends to use for shipment of 3013 containers.

To resolve this problem, the Site proposes that Paragraph 6.2.2.3 be revised to read: "The container components shall be fabricated in accordance with the design issued by Savannah River Site. The packaging sire shall ensure that the loaded and assembled outer container will fit within the approved shipping package(s)". Sub-paragraphs 1) and 2) should be deleted.

The Site believes that the requested change to DOE-STD-3013-2000 is essential in order to avoid incidents wherein assemblies would fail to conform to the existing 126 mm requirement but would otherwise fit in the PCV for the 9975 shipping container. There is also reasonable expectation that the Site's experience, with containers thnt exceed the current 126 mm requirement, will be shared by the other sites intending to package Pu materials in the 3013 container.

If you have any questions or would like additional information, please contact David Hicks at (303) 966-3 122.

Henry F. Walton, Assistant Manager
Facilities Disposition

cc:
J. Tseng, EM-21, HQ
C. O'Dell, EM-33, HQ
M. McCormick, FCG, RFFO
J. Stakebake, ESD, RFFO
A. Gunter, SRO
R. Sena, AL, NMSPO
K. Dodson, LLNL
J. Fulton, K-II
B. Seward, WSRC

Attachment 2: Rationale for this allowance, including SR and TRB recommendations

The scientific basis for DOE-STD-3013 was developed by work coordinated from the Los Alamos National Laboratory with plutonium and other materials experts from National Laboratories and affected DOE sites and programs. Based on this past and ongoing work, it is our collective judgment that the specific value of the diameter is not critical to the long-term, safe storage of the stabilized plutonium-bearing materials. Safe storage is ensured by compliance with stabilization temperature, verification of moisture content of stabilized plutonium-bearing materials, code compliance of the material of construction of the inner and outer cans, and certification of welding integrity. Therefore, this allowance does not affect the safety basis of operations for stabilizing and packaging plutonium-bearing materials in high-integrity cans for long-term storage.

A 127mm diameter is the maximum allowed in order for a welded 30 13 container to fit within a 9975 shipping container (and still allow for a 0.5mm gap between the weld projection of the 3013 container and the wall of the 9975). RFETS predicts (with 30% probability) that their welded 3013 cans' outer diameter will exceed 126mm because the weld projects beyond the can outside surface. RFETS uses a "GO-Gauge" to perform acceptance testing of welded 3013 cans (to ensure that they are capable of fitting within the 9975 shipping container). Remedial actions would have to be taken for those cans that cannot pass through the "GO-Gauge."

What follows are the results of the SR and TRB reviews of the technical merit and safety basis for this allowance (posed as a revision to DOE-STD-3013 during their review).

DOE F 1325.8

United States Government **Department of Energy**

Albuquerque Operations Office

memorandum

DATE:

REPLY TO: NMSPO

SUBJECT: Maximum Size of 3013 Storage Assembly – DOE-STD-3013-2000

TO: Allen Gunter, SR; Randy Erickson, LANL; Sharon Arp, DOE/AL; Brent Ives, LLNL; Angel Joy, RL; and Gary Lanthrum, DOE/AL

Attached to this document is a letter from Rocky Flats Field Office requesting a change to DOE-STD-3013-2000. The change is relative to the maximum size of the "loaded and assembled outer container". With tbia letter I am requesting an analysis of the Rocky Plats' request. Allen Gunter, how does the request impact Savannah River related to the SR Material Acceptance Criteria and 3013 container storage? Randy Erickson, does this request impact any ongoing or planned work at LANL and Sharon At-p, does the 94-1 R&D Program support this change? Brent Ives, does this request impact LLNL canning activities and does LLNL have similar problems with their weld? Angel Joy, does this request have any impact on Richland stabilization activities, canning processes/procedures, and storage activities. Allen Gunter and Gary Lanthrum, does the request impact 9975 shipping container design or application and would the change impact requirements related to the 9975 shipping container. In other words, will the can, modified as per Rocky Flats request, fit into the 9975 and will it then be shippable?

After I have received these analyze, I will have the Technical Review Board review the request and make a recommendation to Albuquerque. Please try to have your analysis to me by December 15, 2000. Thank you for your participation in this exercise.

Gary D. Roberson
Preparing Activity
DOE-Standard-3013-2000
Nuclear Material Stewardship
Project Office

cc:
John Tseng, DOE/HQ
Hank Dalton, RI;
Rich Sena, AL

Westinghouse
Savannah **River Company**
Aiken, SC 29808

NMS-PRJ-2001-00001
Track #10413 (2 years)

JAN 8 2001

Mr. G. M. Nichols, Director
Nuclear Material Stabilization Division
U.S. Department of Energy
Savannah River Operations Office
Aiken, SC 29802

Post-it® Fax Note 7671	Date	# of pages ▶ 2
To Gary Robertson	From Allen Gunter	
Co./Dept	Co	
Phone #	Phone #	
Fax # (505) 845-5872	Fax #	

Dear Mr. Nichols:

SUBJECT: UC-01-035, G. M. Nichols to W. S. Shingler, *Review of Rocky Flats Positions Papers*, 12/22/2000.

We have reviewed bath attachments listed in your letter and we have previously reviewed and agreed with the second attachment 'Criteria for Inspection of Plutonium Metal and Weight Gain Resulting from Oxidation'.

As far as the first attachment 'Maximum Size of the 3013 Storage Assembly' we have the following comments:

WSRC has no objection to changing DOE-STD-3013-2000 Paragraph 6.2.2.3 to as stated in the RFETS request - 'The container components shall be fabricated in accordance with the design issued by Savannah River Site. The packaging site shall ensure that the loaded and assembled outer container will fit within the approved shipping package(s)". With sub paragraphs 6.2.2.3.1) and 6.2.3.3.2) deleted,

The ultimate goal is ensure fit into the approved shipping package(s), However, we do not agree that the rational presented or analysis depicts the actual conditions. The dimensions and tolerances listed were jointly agreed to between the manufacturer (W-EPD), the Design Authority (SRS), and the procuring site (RFETS).

There ware differences of opinion between us as to the correlation af these tolerances and their relevance on the drawings, as well as the capability of any manufacturer lo measure some of these actual dimensions. Instead of measuring these tolerances, the manufacturer agreed to build a Go / No Go gauge to Inspect each manufactured container, That inspection ensures that all outer cans are within a 4.933 ± 0.001 = 4,934 in. (125.3 ± 0.03 = 125.33 mm.) right circular cylinder. (DOE-STD-3013-2000 limitation is 4.961 in. (126 mm)).

JAN 8 2001

The lid is also manufactured slightly less than the outer can Outer Diameter. The dimension of the outer can lid is 4.917 ± 0.003 = 4.920 in. (123.9 ± 0.1 = 125 mm) to eliminate lid runout tolerances listed in the RFETS analysis. That would mean the loaded can under the worst case scenario with heat load expansion af 0.011 in. (0.28 mm.), without weld protrusion, would be 4.934 + 0.011 = 4.945 in. (125.33 + 0.28 = 125.61 mm), within the standard.

The welded containers praduccd at LLNL that we witnessed have weld protrusions in the weld overlap positions ranging from 0. I to 0.2 mm. RFETS has not presented the data to the SRS Design Authority concerning the 17% of their welds with protrusions of 1.0 mm. This seems extremely excessive for a horizontal fusion laser weld, especially compared to results at LLNL. Furthermore, if RFETS has I .O mm. protruding an this weld, there is a concern that there may be areas of undercut that da not meet the ASME Code.

The Primary Containment Vessel of the 9975 Shipping Packages is built to an inner diameter minimum of 5.02 in. (127.5 mm.), This diameter is also verified by a Go / No Go gauge. If the Standard Committee accepted the RFETS request as is, the 4.997 in. (126.93 mm,) 3013 outer can will fit into the cold 9975 Shipping container,

WSRC has no objection to the proposed standard change, has ASME Code concerns, and has not been presented any data to support the standard change.

Sincerely,

for W S Shingler

W. S. Shingler, Manager
NMS&S Project Integration

BRS:bcgr

cc: H. A. Gunter, 703-F
D. c. Wood, 703-F
B. R. Seward, 703-F

1325.8

United States Government **Department of Energy (DOE)**

memorandum

Savannah River Operations Office (SR)

DATE: FEB 0 8 2001

REPLY TO
ATTN OF: NMPD (Gunter, 803/952-4536)

SUBJECT: DOE STD-3013-00 Requested Change on the Maximum Size of the 3013 Storage Assembly

TO: Gary D. Roberson, Nuclear Material Stewardship Program Office, AL

Savannah River Operations Office (SR) has completed its review of the proposed change to DOE-STD-3013 concerning the increase in the maximum size of the 3013 container from 126mm to 127mm, SR does not object to changing DOE-STD-3013-2000 Paragraph 6.2.2.3 as stated in the Rocky Flats request "The container components shall be fabricated in accordance with the design issued by Savannah River Site, The packaging sire shall ensure the loaded and assembled outer container will fit within the approved shipping package(s)."' In addition, SR requests that DOE-STD-3013-2000 Paragraph 6.2.2.3.1 remain in the standard, but be changed to state – "Inside Diameter 127 mm (5.00 in)." The ultimate goal is to ensure fit into the approved shipping package(a).

Questions you may have should be directed to Allen Gunter, at 803 952-4536.

S. W. McAlhany, Acting Director,
NuclearMaterials Program Stabilization

UC-01-072

cc:
H. Dalton, RFETS

Post-it® Fax Note 7671	Date	# of pages ▶ 1
To Gary Roberson	From Allen
Co./Dept.	Co.
Phone #	Phone #
Fax # 845-5872	Fax #

DOE F1326.8

United States Government **Department of Energy**

Albuquerque Operations Office

memorandum

DATE:

REPLY TO ATTN OF: NMSPO

SUBJECT: Revision 3013 Standard Technical Review Board

TO: Members of the 3013 Standard Technical Review Board

A change to §6.2.2.3 of DOE-STD-3013-2000 has been requested by the Rocky Flats Field Office (RFFO). The language in the Standard now reads:

The loaded and assembled outer container shall fit within a right circular cylinder with the following dimensions:

1) Inside diameter 126 mm (4.961 in,).
2) Internal height of255 mm (10.030 in.).

RFFO has proposed the following to replace the current language:

The container components shall be fabricated in accordance with the design issued by Savannah River Site. The packaging site shall ensure that the loaded and assembled outer container will fit within the approved shipping pa&age(s).

No change was requested to the corresponding portion of Appendix A, which now reads:

The outer container is sized to fit into existing certified or currently proposed shipping containers (primarily the 9975 and SAFKEG packages). This design will minimize future handling and avoid unnecessary additional personnel exposure, operational risk, and waste generation.

You are requested to consider this change and make a recommendation as to its implementation. Attached are the original request by RFFO, and comments on it we have solicited and received from around the Complex,

RFFO has stated that approximately 17% of the containers produced by their PuSPS machine will probably not meet the numeric requirements of §6.2.2.3 but will meet the intent as expressed in Appendix A because they will fit into the 9975 Pressure Containment Vessel (PCV), Their analysis shows a maximum size of 126.93 mm when all tolerances are combined. WSRC indicates the minimum opening in the 9975 PCV to be 127.5 mm. The comments we have received have generally indicated a neutral or favorable reaction.

We believe that a better choice of language would be to simply change the diameter of the "go/no-go" gage and keep the rest of the current language. That would cause the Criterion to read:

The loaded and assembled outer container shall At within a right circular cylinder with the following dimensions:

1) Inside diameter 127 mm (5,000 in,).
2) Internal height of255 mm (10.030 in,),

We believe this approach to be superior to that suggested by RFFO because 1) it allows for alternate designs, rather than just the so-called "BNFL" design; 2) it provides the criteria directly, rather than by reference to another document or set of documents, 3) it provides the two parameters of interest and does not complicate the issue by including any other specifications which might be in the SRS design, and 4) it guarantees a fit without requiring development of or reliance on new procedures to implement the requirements embodied in the last sentence of the RFFO proposal,

You may wish to consider whether 1.27 mm is the correct figure, It provides for only 0.5 mm diametral clearance and an additional tenth of a millimeter or so might be helpful, provided that the "buildup" of tolerances can be accommodated within a smaller figure.

Your response should be coordinated with the TRB chair, Jerry Stakebake, Please send your response to him by COB February 2 1. In return, 1 request that the coordinated TRB response be to me by February 23, 2001. T realize this is a short timescale but if we are to change the standard, pending your recommend&ion, it needs to be completed by the end of April and the OST process is takes approximately two months at best. Please provide your report to me, Please also provide to me and to George Bailey (gbailey@scientech.com) an e-mail containing the substance of your' recommendation as soon as you have reached agreement. Thank you for your efforts in this matter.

G.D. Roberson
Technology Manager
30 13 Preparing Activity
Nuclear Material Stewardship
Project Office

Distribution:

Jerry Stakebake, RFFO
Leonard Gray, LLNL
Allen Gunter, SR
Sujita Pierpoint, DOE/HQ, DP-20
John Tseng, DOE/HQ, EM-66

RFO F 1325.8

United States Government **Department of Energy**
Rocky Flats Field Office

memorandum

DATE: MAR 0 7 2001

REPLY TO
ATTN OF: AME:ESD:JLS:01-00451

SUBJECT: Technical Review Board Recommendation on Revision of DOE-STD-3013-2000

TO: Gary D. Roberson, Nuclear Materials Stewardship Project Office, Albuquerque Operations Office

The Technical Review Board (TRB) has reviewed rhe request made by Rocky Flats to change section 6.2.2.3 of the DOE-STD-3013-2000 to increase the inside diameter of the right circular cylinder used as an acceptance gauge for the outer 3013 can. The TRB also considered input from the 3013 design authority and other DOE sites. It is the consensus of the TRB that the requested changes are acceptable. Therefore, the TRB recommends that Section 6.2.2.3 of the DOE-STD-3013-2000 be changed to read as follows:

*"The loaded **and assembled outer container shall fit within a right circular cylinder** with the **following** dimensions:*

1) ***Inside diameter 127 mm (5.00 in.)***
2) *Internal height of 255 mm (10.030 in.)"*

Attachcd is the signed concurrence from the TRB members. I have abstained from voting because of a vested interest in obruining the change,

Questions regarding the decisions of the TRB should be directed co Jerry Stakebake at **(303)** 966-2507.

Jerry Stakebake, Chairman

Attachments

cc:
Sujita Pier-point, DP-253, **HQ**
John Tseng, EM-21, HQ
Allen Gunter, SRS
Leonard Gray, LLNL

DOE-301 3-2000 Technical Review Board recommendations

DATE:

REPLY TO ATTN OF:

TO: Jerry Stakebake, AME/ESD
U. S. Department of Energy
10808 Highway 93, Unit A
Golden, CO 80403

SUBJECT: Revision of DOE-STD-3013-2000

I have reviewed the proposed change to section 6.2.2.3 of DOE-STD-3013-2000 requested by Rocky Flats. Specifically, I have considered the following proposed wording to replace the existing section:

The loaded and assembled outer container shall fit within a right *circular Cylinder with the following dimensions:*
1) Inside diameter 127 mm (5.00 in.)
2) Internal height of 255 mm (10.030 in.)

☒ Yes, I concur with the above recommended change.

☐ No, I do not concur with the above recommended change for the following reasons:

Leonard W. Gray
signature

DOE-301 3-2000 Technical Review Board

recommendations

DATE: February 27, 2001

REPLY TO ATTN OF: H. Allen Gunter, Nuclear Materials Program Division, Savannah River Operations Office

TO: Jerry Stakebake, AME/ESD
U. S. Department of Energy
10808 Highway 93, Unit A
Golden, CO *80403*

SUBJECT: Revision of DOE-STD-3013-2000

I have reviewed the proposed change to section 6.2.2.3 of DOE-STD-3013-2000 requested by Rocky Flats. Specifically, I have considered the following proposed wording to replace the existing section:

> ***The loaded and assembled outer container shall fit within a right circular Cylinder with the following dimensions:***
> ***1) Inside diameter 127 mm (5.00 in.)***
> ***2) Internal height of 255 mm (10.030 in.)***

[x] Yes, I concur with the above recommended change,

[ ] No, I do not concur with the above recommended change for the following reasons:

H. Allen Gunter

H. Allen Gunter, Savannah River Operations Office

DOE-301 34000 Technical Review Board

recommendations

file sent on 2/26/01

DATE: 2/26/01

REPLY TO ATTN OF:

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL # of pages ▶
To Jerry Stakebake From John Tseng
Dept./Agency Phone #
Fax # 303-966-4765 Fax #
NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

TO: Jerry Stakebake, AME/ESD
U. S. Department of Energy
10808 Highway 93, Unit A
Golden, CO 80403

SUBJECT: Revision of DOE-STD-3013-2000

I have reviewed the proposed change to section 6.2.23 of DOE-STD-3013-2000 requested by Rocky Flats. Specifically, I have considered the following proposed wording to replace the existing section:

The loaded and assembled outer container shall fit within a right circular Cylinder with the following dimensions:

1) *Inside diameter 127 mm* (5.00 *in.)*
2) *Internal* height of 255 mm *(10.030* in.)

☑ Yes, I concur with the above recommended change.

☐ No, I do not concur with the above recommended change for the following reasons:

signature

DOE-3013-2000 Technical Review Board

recommendations

DATE:

REPLY TO ATTN OF:

TO: Jerry Stakebake, AME/ESD
U. S. Department of Energy'
10808 Highway 93, Unit A
Golden, CO 80403

SUBJECT: Revision of DOE-STD-3013-2000

I have reviewed the proposed change to section 6.2.2.3 of DOE-STD-3013-2000 requested by Rocky Flats. Specifically, I have considered the following proposed wording to replace the existing section:

The loaded and assembled outer container shall fit within a right circular Cylinder with the following dimensions:
1) *Inside diameter 127 mm (5.00 in.)*
2) *Internal height of 255 mm (10.030 in.)*

☑ Yes, I concur with the above recommended change.

☐ No, I do not concur with the above recommended change for the following reasons:

Jerry,
Again, what's the reason for perpendicularity tolerance? We left you a voice-mail to that effect. Could you please call me or Vic Loczi on this? Thank you.

Dista Pizpoint
signature

12.7 3013 Container Size Check and Weighing [3013, 6.2.1.3-1]

This is a stand-alone section and may be performed independently or in conjunction with other Instruction sections.

WARNING

While using the can lifting device, personnel should wear leather (or other protective) gloves to protect hands from injury.

Field Operator

[1] Use the can-lifting device to place a 3013 Container into Go/No Go Gauge.

[2] Use the Depth Gauge to measure the distance from the top of the Go/No Go Gauge to the top of the 30 13 Container at several different locations.

DCF-005

[3] **IF** the distance from the top of the Go/No Go Gauge to the top of the 3013 Container is **NOT** at least 4.08 mm,
THEN STOP and notify Supervision.

Supervision will initiate an NCR for a failed 3013 Container in accordance with 1 -A65-ADM- 15.0 1, Control of Nonconforming Items.

[4] Check (√) the appropriate Pass or Fail box on Appendix 2.

[5] Ensure that the Balance (scale) is ON, and check-weighed as required.

Check-weighing is completed in accordance with 4-X08-BAL-001, Balances.

[6] Make a copy of the Balance Check Weight Data Sheet, and add to the Data Package for the 3013 Container.

DCF-005

[7] Zero the Balance.

[8] Use the can-lifting device to place the 3013 Container on the Balance.

DCF-005

12.7 3013 Container Size Check and Weighing (continued)

NOTE *The Balance Scale Number, Employee Signature and Date may be recorded after the 3013 Container is removed from the Balance.*

[9] Document the following on Appendix 2:

- The 3013 Container Gross Weight (to tenths of a gram) [3013, 6.5.2.2.6-1]
- Balance Scale Number
- Signature, Employee Number, and date [3013, 6.5.2.3.4-1]

[10] **IF** the 3013 Container Gross Weight exceeds the maximum weight limit (13 kg for Oxide, 11.7 kg for Metal), *(NSTR-002-00)*
THEN STOP and notify Supervision.

Supervision will initiate an NCR for a failed 3013 Container in accordance with 1 -A65-ADM- 15.01, Control of Nonconforming Items

DCF-005

[11] Remove the 3013 Container from the Balance Scale and position for survey.

[12] Request RCT to perform and document the required surveys on Appendix 2. [3013, 6.5.2.2.5-1]

[13] Use the can-lifting device to place surveyed 3013 Container into a 2-Position Cart.

Supervisor

[14] Review and sign Appendix 2.

DCF-005

[15] Ensure copies of this Data Package (including all Stabilization procedure appendixes) are provided to the Campaign Planner/Production Lead.

Field Operator or NMH&P

[16] Transfer the 3013 Container (including the original Data Package in the numbered color-coded Inventory Control Folder) to the location designated by Supervision.

DCF-001

Supervision may direct 3013 Containers to be transferred to approved temporary storage area, Calorimetric Assay, Radiography, Weld Inspection, or Vault Storage. Transfers out of Room 3713 require NMC support and appropriate transfer paperwork.

12.8 Empty Oxide Convenience Can Weigh Station Operation

This is a stand-alone section and may be performed independently or in conjunction with other Instruction sections.

NOTE *The following operation is performed manually at the Empty Oxide Convenience Can Weigh Station (J4001), unless otherwise stated.*

Console Operator

[1] Ensure that the PPCS OIU is operational, indicated by a steady green PLC1 COMMS light.

Field Operator

[2] Ensure that the Balance has current calibration label, and has been check weighed as required.

NOTE *The Balance may be zeroed at any time, as needed.*

[3] **IF** the Empty Convenience Can Weigh Station readout indicates 0.000 kg gross and the bar code reader MODULE lamp is **NOT** green,
THEN notify Supervision to repair the bar code reader.

DCF-005

[4] Examine the empty Oxide Convenience Can(s) and lids for the following:

- Cleanliness, inside and out (a can with surface contaminants is rejected and segregated to avoid later use)
- Ability to thread/unthread lid
- ID number starts with R4,

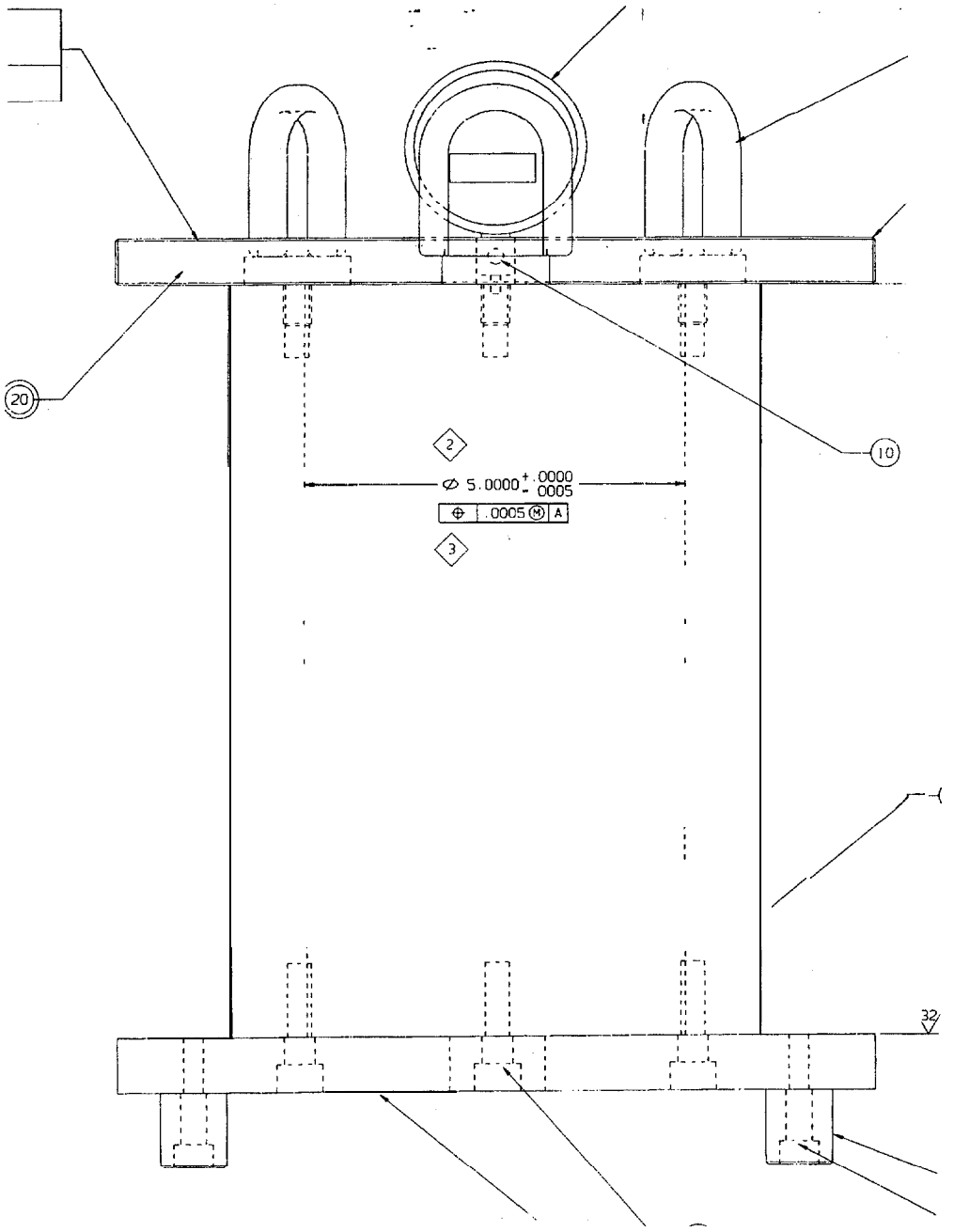
AND replace if ID number does **NOT** start with R4 **OR** if condition is unacceptable.

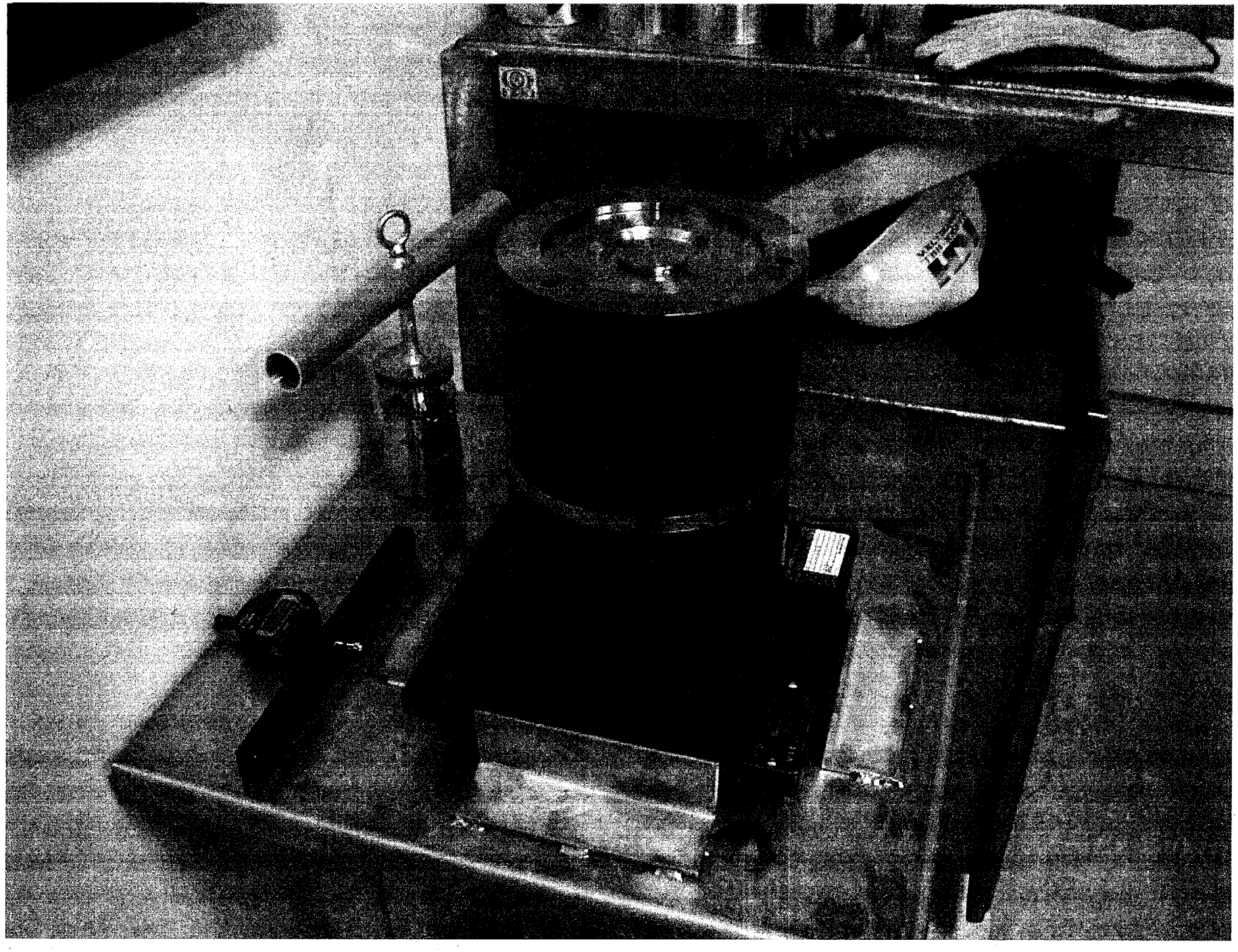
DCF-002

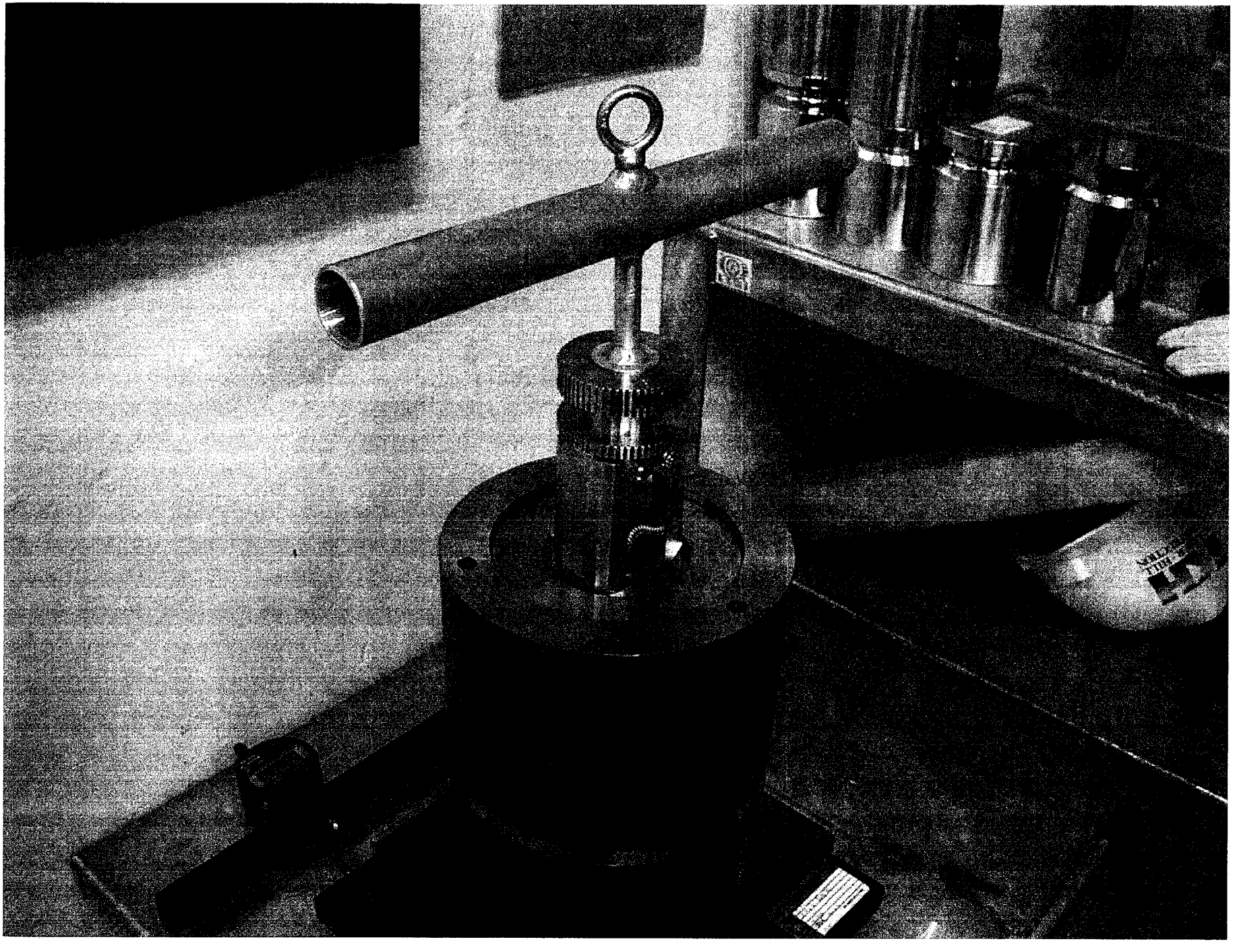
NOTE *Once a Convenience Can and lid are weighed (and entered into the computer as the container tare weight), the can and lid must be treated as a single unit. If either the can or lid is damaged anytime after weighing, neither part may be used, and must be discarded and the container tare weight deleted from the computer.*

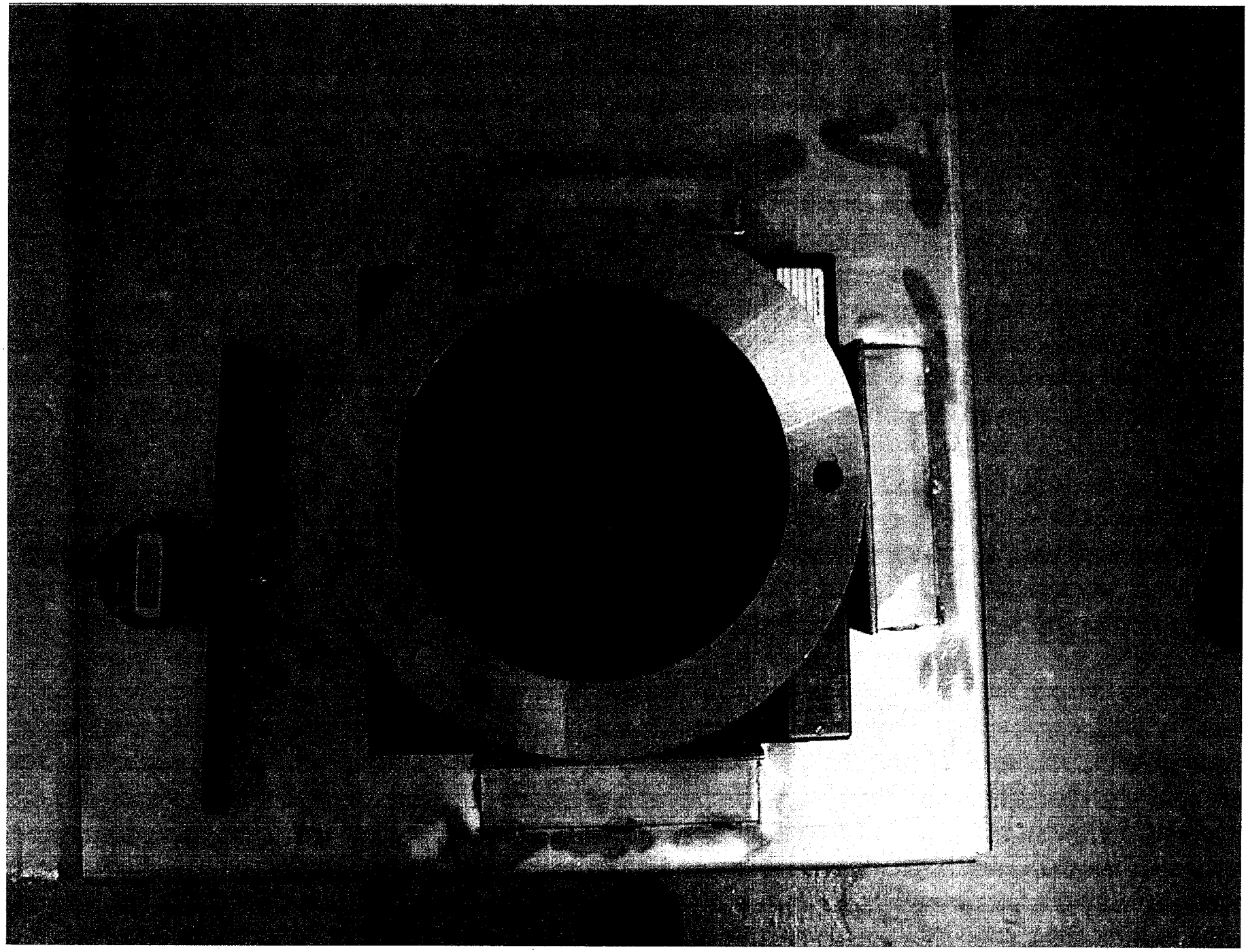
[5] Position the Empty Oxide Convenience Can on weigh station platform guides in the horizontal position with the lid to the right against the stop.

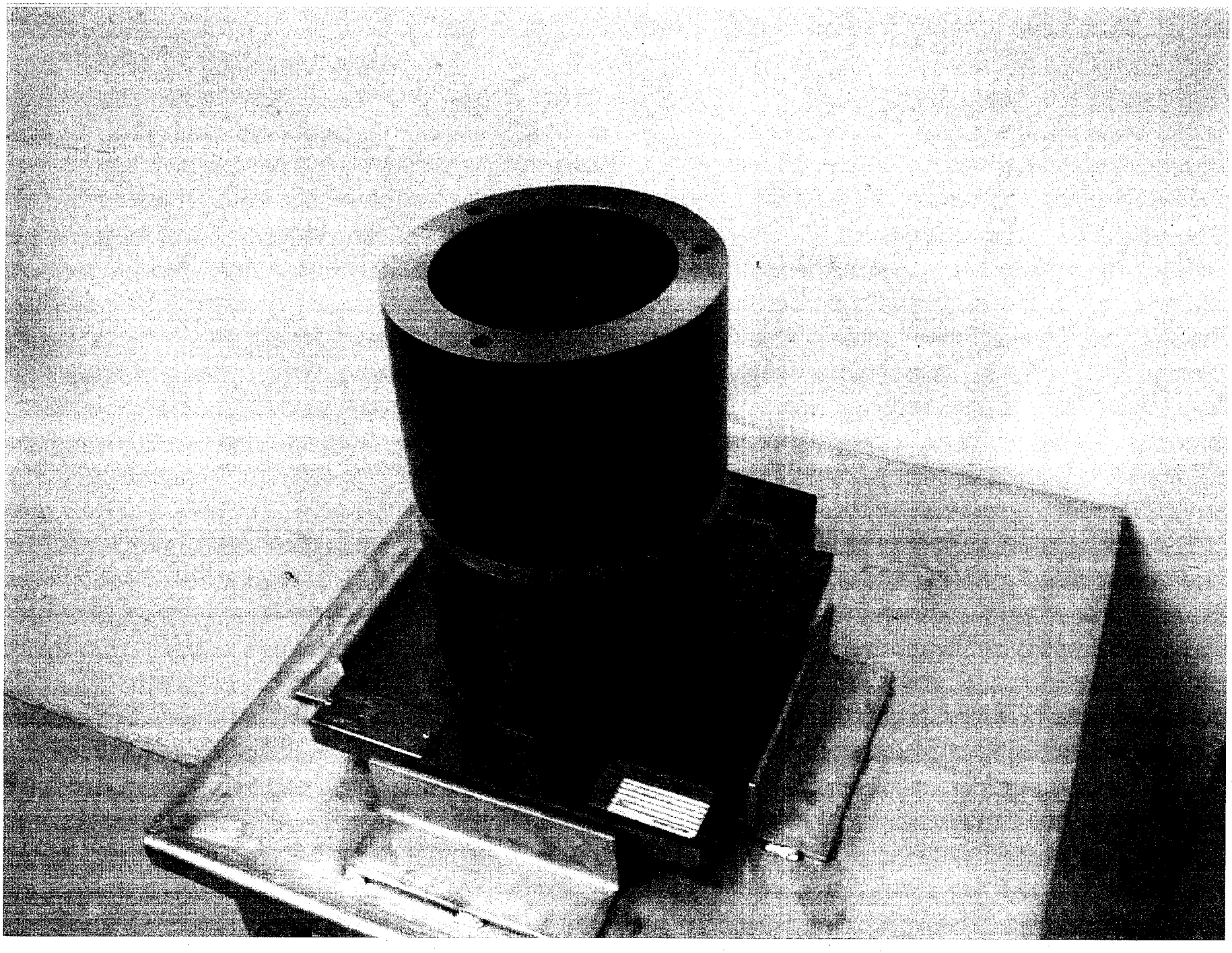
[6] Ensure that Console Operator is monitoring Process Screen 2/1 with the "Ex. Weigher Data" box visible, and press the ESC button after the display unit of the Empty Convenience Can Weigh Station reads: "esc when ready".

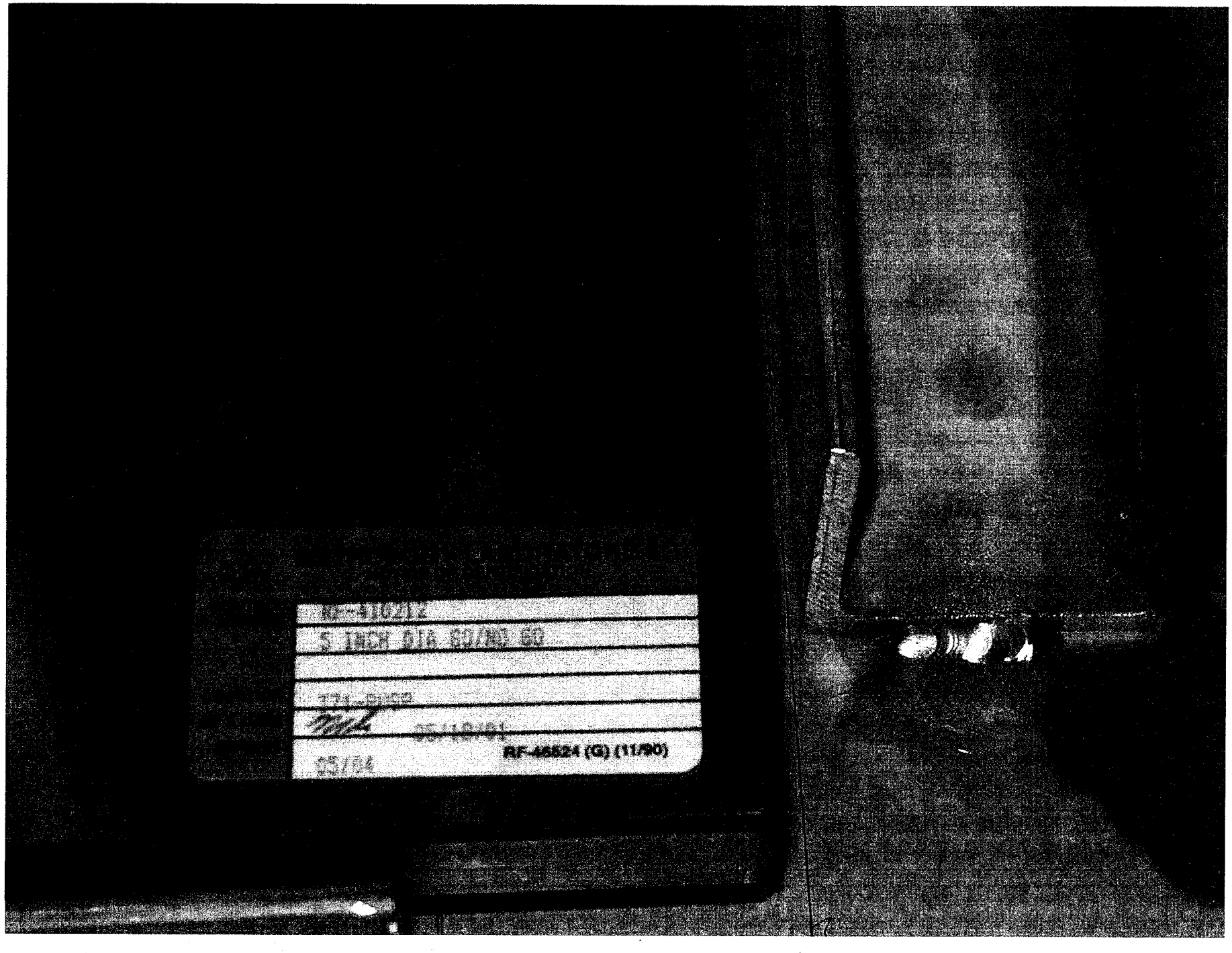

20
2
Ø 5.0000 +.0000 -.0005
⌖ .0005 Ⓜ A
3
10
32










5 INCH DIA GO/NO GO
RF-46524 (G) (11/90)